



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

RBW6405G06131-3G-PO
Job Sheet 189297



Part No: RBW6405G06131-3G-PO

Job Qty: 2 pcs

Part Name: Extractor Assembly



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 1/22/19

Job Tracking No:

Due Date: 3/19/19

Created By: Patrick Lussier

Type: Stock

Description:

Note: DWG RBW6405G06131-3G Rev. A IPP Rev. 3 18.10.05 New issue DP Verify DD

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier	Lead Time	
100	Purchasing	2 pcs	DP	3/19/19	0.00	0.00	Purchasing - 1		DP MAR 25 2019
							Purchasing - 2		
							Purchasing - 3		
110	Packaging 2-1 - Receive - B4B	2 pcs		3/19/19	0.00	0.00	Packaging 2 - 1 - B4B		DP MAR 25 2019
							Packaging 2 - 2 - B4B		
							Packaging 2 - 3 - B4B		
							Packaging 2 - 5 - B4B		
							Packaging 2 - 4 - B4B		
							Packaging 2 - 6 - B4B		
							Packaging 2 - 7 - B4B		
							Packaging 2 - 8 - B4B		
							Packaging 2 - 9 - B4B		
							Packaging 2 - 10 - B4B		
							Packaging 2 - 11 - B4B		
							Packaging 2 - 12 - B4B		
							Packaging 2 - 13 - B4B		
							Packaging 2 - 14 - B4B		
							Packaging 2 - 15 - B4B		
							Packaging 2 - 16 - B4B		
							Packaging 2 - 17 - B4B		
							Packaging 2 - 18 - B4B		
							Packaging 2 - 19 - B4B		
							Packaging 2 - 20 - B4B		
							Packaging 2 - 21 - B4B		
							Packaging 2 - 22 - B4B		
							Packaging 2 - 23 - B4B		
							Packaging 2 - 24 - B4B		
							Packaging 2 - 25 - B4B		
							Packaging 2 - 26 - B4B		
							Packaging 2 - 27 - B4B		
							Packaging 2 - 28 - B4B		



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
CANADA
TEL.: 1 613 632-5200
Email: sales@dartaero.com
www.dartaerospace.com

Container No: S165957



Part: RBW6405G06131-3G

Job No: 189297

Serial No/Batch: S165957

Revision: 3

Inspector:

Exp Date:

Instructions:

Date: 03/25/19

Scrap

Part Op **100** - Purchasing - Issue P/O: _____ MANUFACTURE RBW6405G06131-3G AS PER DWG Supplier: METEC
 Descriptions: Certificate of conformity is required
110 - Receive & Inspect for Damage & Mat'l Certs
120 - QC6- All purchased or subcontracted product
130 - Identify as per dwg & Stock Location: _____
140 - QC21- Final Inspection - Work Order Release

Job BOM				
Part / Item	Component Name	Quantity	Operation	Container
RBW6405G06131-3GP	Reaction Assembly	2 Ea (1 ea)	100-Purchasing	5165950
Job Allocations				
Operation	Component Part	Required	Inventory	Allocated
100-Purchasing	RBW6405G06131-3GP	2	0	0
Part Specifications				
Specifications could not be found.				

Plex 3/5/19 1:15 PM Dart.Hadley.Shannon



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RBW6405G06131-3G-PO

Job Sheet 189297



Part No: RBW6405G06131-3G-PO

Job Qty: 2 ea

Part Name: Extractor Assembly



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 1/22/19

Job Tracking No:

Due Date: 3/19/19

Created By: Patrick Lussier

Type: Stock

Description:

Note: DWG RBW6405G06131-3G Rev. A IPP Rev. 3 18.10.05 New issue DP Verify DD

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier	Lead Time	
100	Purchasing	2 pcs		3/19/19	0.00	0.00	Purchasing		
110	Packaging	2 pcs		3/19/19	0.00	0.00	Packaging2		
120	QC	2 pcs		3/19/19	0.00	0.00	QC6		
130	Packaging	2 pcs		3/19/19	0.00	0.00	Packaging3		
140	QC21-FG	2 Ea		3/19/19	0.00	0.00	QC21		

Part Op **100** - Issue P/O: 042355 MANUFACTURE RBW6405G06131-3G AS PER DWG Supplier: METEC Certificate of Descriptions: conformity is required

x2 P/Luss 22 Jan 2019

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
RBW6405G06131-3GP	Reaction Assembly	2 Ea (1 ea)	100-Purchasing	

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
100-Purchasing	RBW6405G06131-3GP	2	0	0

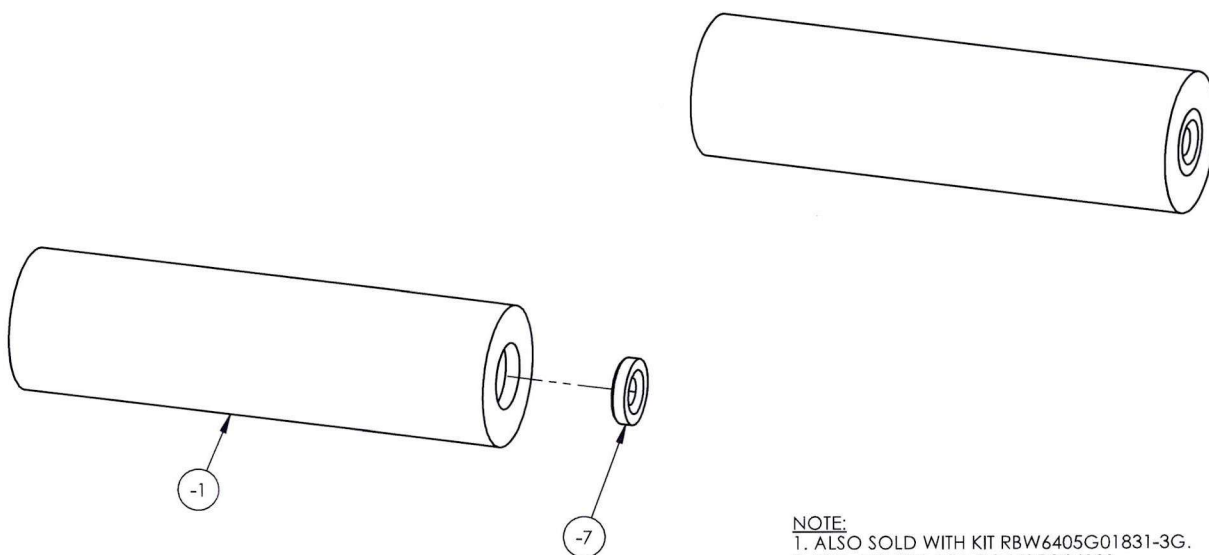
Part Specifications

Specifications could not be found.

Plex 1/22/19 1:03 PM dart.Lussier.Patrick

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REVISIONS				
REV	ECR	DESCRIPTION	DATE	INITIAL
A		ADDED MISSING Ø1.750 DIMENSION -3, CHANGED NOTE 1, ADDED ASSY DWG.	4/26/2011	RJC
B		-3 DIMENSION WAS Ø1.50 IS Ø1.501-1.500, -5 DIMENSION WAS Ø1.50 IS Ø1.4996-1.4992.	6/6/2014	DJN
3	16-0021	UPDATED TO NEW STANDARDS. ADDED REF T/N NOTE. -1 ADDED DIMS Ø.939-.940, .200. ADDED CLEAN UP O.D. AFTER WELDING NOTE. -3 ADDED DIMS Ø1.5, .20. -5 CH'D DIMS WAS Ø.939-.9400 IS Ø.92. WAS Ø1.4992-1.4996 IS Ø1.497-1.498, CH'D NOTE WAS BORE TO Ø.9400 AFTER WELDING IS BORE TO FINAL DIM AFTER WELDING. SEE -1. -7 CH'D DIM WAS .400 IS (.390). CH'D TOLERANCE ON NON-CRITICAL DIMENSIONS.	2/5/2016	DPD

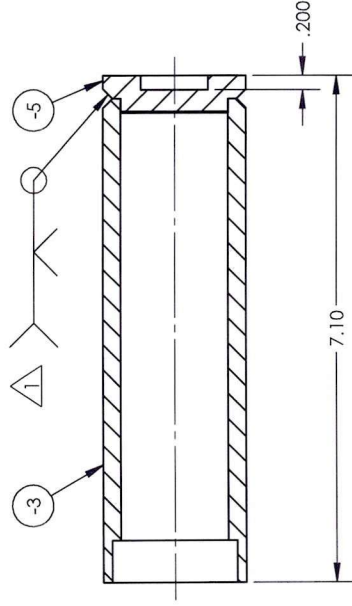
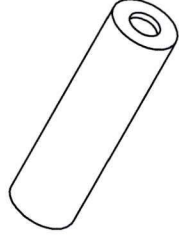


NOTE:
1. ALSO SOLD WITH KIT RBW6405G01831-3G.
2. REF. AGUSTA T/N: 3G6405G06131.

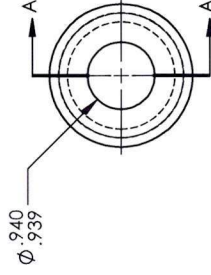
DART AEROSPACE																					
TITLE REACTION ASSY.																					
DWG NO. RBW6405G06131-3G	REV 3																				
<table border="1"> <tr> <td>MAT'L</td> <td>UNLESS OTHERWISE SPECIFIED</td> </tr> <tr> <td>HEAT TREAT</td> <td>DIMENSIONS ARE IN INCHES</td> </tr> <tr> <td>FINISH</td> <td>.XXX ± .005 FRACTIONS ± 1/8</td> </tr> <tr> <td>SPEC</td> <td>.XX ± .01 ANGLES ± 5°</td> </tr> <tr> <td></td> <td>.X ± .1 SURFACES = 125/</td> </tr> <tr> <td colspan="2">1. BREAK ALL SHARP EDGES .015 x 45° OR .015R</td> </tr> <tr> <td colspan="2">2. DIMENSIONAL LIMITS APPLY AFTER PLATING</td> </tr> <tr> <td colspan="2">3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009</td> </tr> <tr> <td colspan="2">USED ON MODEL</td> </tr> <tr> <td colspan="2">AGUSTA AW139</td> </tr> </table>		MAT'L	UNLESS OTHERWISE SPECIFIED	HEAT TREAT	DIMENSIONS ARE IN INCHES	FINISH	.XXX ± .005 FRACTIONS ± 1/8	SPEC	.XX ± .01 ANGLES ± 5°		.X ± .1 SURFACES = 125/	1. BREAK ALL SHARP EDGES .015 x 45° OR .015R		2. DIMENSIONAL LIMITS APPLY AFTER PLATING		3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009		USED ON MODEL		AGUSTA AW139	
MAT'L	UNLESS OTHERWISE SPECIFIED																				
HEAT TREAT	DIMENSIONS ARE IN INCHES																				
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3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009																					
USED ON MODEL																					
AGUSTA AW139																					
<table border="1"> <tr> <td>DRAWN BY:</td> <td>CLOUGH</td> </tr> <tr> <td>CHECKED:</td> <td>CLOUGH</td> </tr> <tr> <td>OPPS APPR:</td> <td>ANDERSON</td> </tr> <tr> <td>QA APPR:</td> <td>LINDSAY</td> </tr> <tr> <td>APPROVED:</td> <td>GILBERT</td> </tr> </table>	DRAWN BY:	CLOUGH	CHECKED:	CLOUGH	OPPS APPR:	ANDERSON	QA APPR:	LINDSAY	APPROVED:	GILBERT	<table border="1"> <tr> <td>SCALE</td> <td>1:2</td> </tr> <tr> <td>DATE</td> <td>3/19/2010</td> </tr> <tr> <td>SHEET</td> <td>1 OF 5</td> </tr> </table>	SCALE	1:2	DATE	3/19/2010	SHEET	1 OF 5				
DRAWN BY:	CLOUGH																				
CHECKED:	CLOUGH																				
OPPS APPR:	ANDERSON																				
QA APPR:	LINDSAY																				
APPROVED:	GILBERT																				
SCALE	1:2																				
DATE	3/19/2010																				
SHEET	1 OF 5																				

ASSY QTY	ASSY QTY	B/O	Part #	UNIT QTY	Description	Material	B/O INFORMATION OR SPECIFICATIONS	PG.
	X		-1	1	REACTION ASSY. WELDMENT			2
	1		-3		TUBE	6061		3
	1		-5		CAP	6061		4
			-7	1	WASHER	O-1		5
	ASSY -1							

REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
3	16-0321	ADDED DIMS Ø 939-940, .003. ADDED CLEAN UP O.D. AFTER WELDING NOTE.	2/5/2016	DPD	JAG



SECTION A-A



NOTE:

1 CLEAN UP O.D. AFTER WELDING.



REACTION ASSY.

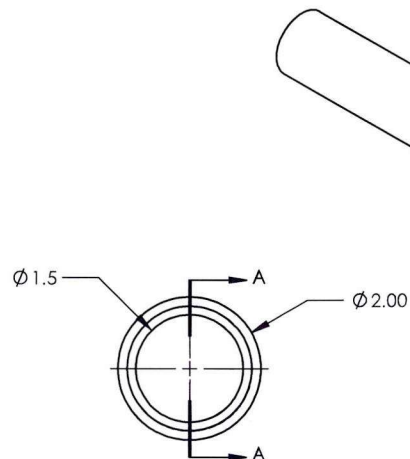
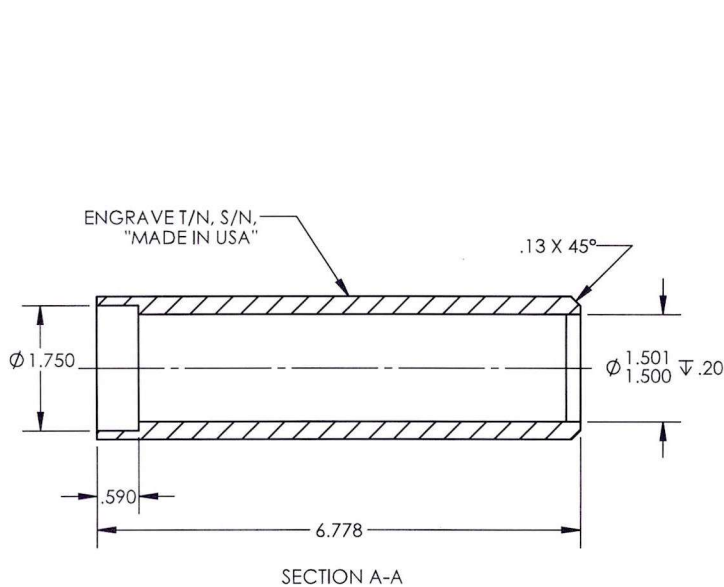
DWG NO.	RBW6405G06131-3G-1		REV	3
MAT'L	UNLESS OTHERWISE SPECIFIED			
FINISH	FRACTIONS 24/16			
FINISH	CLEAR ANODIZE			
SPEC	MIL-A-8625, TYPE II, CLASS I	XXX $\pm$.010 .XX $\pm$.005 .X $\pm$.001 .XX $\pm$.005 .X $\pm$.001		
DRAWN BY:	CLOUGH	1. BREAK ALL SHARP EDGES		
CHECKED:	CLOUGH	2. DIMENSIONAL LIMITS APPLY		
QCS APPR:	ANDERSON	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009		
QA APPR:	LINDSAY	USED ON MODEL		
APPROVED:	GILBERT	AGUSTA AWT39		
SCALE:	1:2	DATE	3/19/2010	
SHEET	1		SHEET 2 OF 5	

①

REACTION ASSY. WELDMENT

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
A		ADDED MISSING Ø1.750 DIMENSION -3.	4/26/2011	RJC	
B		-3 DIMENSION WAS Ø1.50 IS Ø1.500-1.501.	6/6/2014	DJN	RJC
3	16-0021	-3 ADDED DIMS Ø1.5, .20.	2/5/2016	DPD	JAG



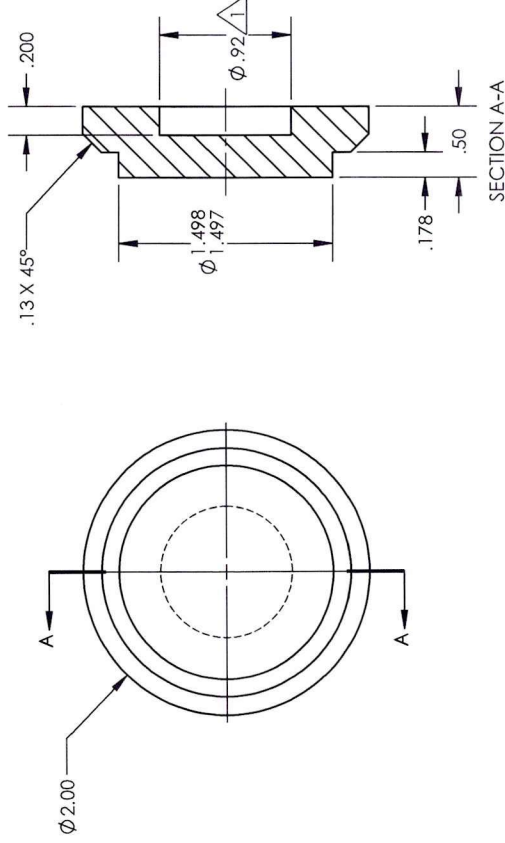
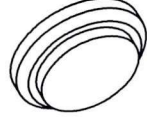
(-3)
TUBE

DART AEROSPACE	
TITLE REACTION ASSY.	
DWG NO. RBW6405G06131-3G-3	REV 3
MAT'L 6061 TREAT FINISH SEE -1 SPEC DRAWN BY: CLOUGH CHECKED: CLOUGH OP'S APPR: ANDERSON QA APPR: LINDSAY APPROVED: GILBERT	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .005 FRACTIONS ± 1/16 .XX ± .01 ANGLES ± 5° .X ± .1 SURFACES = 125/✓ 1. BREAK ALL SHARP EDGES .015 X 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009 USED ON MODEL AGUSTA AW139	
SCALE 1:2	DATE 3/19/2010
SHEET 3 OF 5	

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REVISIONS

REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
B		-5 DIMENSION WAS Ø1.50 IS Ø1.499±.1.499Z.	6/6/2014	D/JN	RJC
3	16-0021	-5 CHD DIMS WAS Ø.599±.9400 IS Ø.92 WAS Ø1.497±.1.499Z. CHD NOTE WAS BORE TO Ø.9400 AFTER WELDING IS BORE TO FINAL DIM AFTER WELDING. SEE -1.	2/5/2016	D/D	JAG



NOTE:

1. BORE TO FINAL DIM AFTER WELDING, SEE -1.



REACTION ASSY.

DWG NO.	RBW 6405G06131-3G-5	REV	3
MAT'L	6061	UNLESS OTHERWISE SPECIFIED	
HEAT		DIMENSIONS IN INCHES	
FINISH	SEE -1	ANGLES ±.18	
		XX ±.01	
		XX ±.01	
		XX ±.01	
SPEC		1. BREAK ALL SHARP EDGES	
DRAWN BY:	CLOUGH	2. DIMENSIONAL LIMITS APPLY	
CHECKED:	CLOUGH	3. AFTER PLATING	
OPPS APPR:	ANDERSON	4. DIMENSIONAL LIMITS APPLY	
QA APPR:	LINDSAY	5. USED ON MODEL	
APPROVED:	GILBERT	AGUSTA AW139	
SCALE	1:1	DATE	3/19/2010
			SHEET 4 OF 5

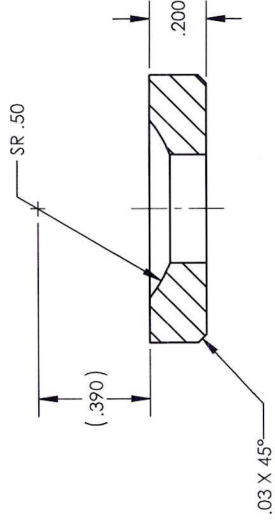
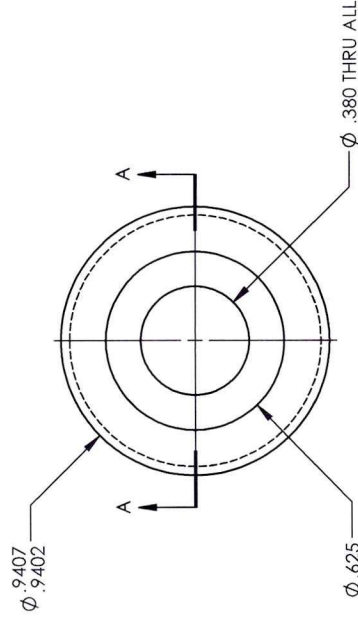
(5)

CAP

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REVISIONS

REV	ECP	DESCRIPTION	DATE	INITIAL	APPROVED
3	16-002	1.7 CHD DIM WAS .400 IS (.390).	2/5/2016	DPD	JAG



REACTION ASSY.

DWG NO.	RBW6405G06131-3G-7	REV	3
MATL	Q-1	UNLESS OTHERWISE SPECIFIED	
FINISH	RC 50-55	DIMENSIONS IN INCHES	
FINISH	BLACK OXIDE	FRACTIONS 1/8	
SPEC		ANGLES 1/8	
DRAWN BY:	CLOUGH	SURFACES 1/8	
CHECKED:	CLOUGH	1. BREAK ALL SHARP EDGES	
OPPS APPR:	ANDERSON	2. DIMENSIONAL LIMITS APPLY	
QA APPR:	LINDSAY	3. AFTER PLATING AND TOL PER	
APPROVED:	GILBERT	ASME Y14.5M-2009	
SCALE	2:1	USED ON MODEL	
DATE	3/19/2010	AGUSTA AW139	
SHEET	5 OF 5		



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER

PO042355



Supplier: MEM001-VC
Metec Metal Technology Inc.
20 Terry Fox Drive PO Box 781
Vankleek Hill
ON
K0B 1R0 Canada
Phone: 613 678 3957
Fax: 613 678 3956

Attention: Walz, Shigi

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

PO No: PO042355
PO Date: 1/22/19
Due Date: 3/19/19
Purchase Order Revision:
Revision Date:
Ship-To Contact: Lussier, PatrickPhone:

Via: Ground
Pymt Terms: Net 60
Freight Terms:
Special Comments:

Items

Line Item	Job	Part	Supplier Part No	Item No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	189295	RBW6405G06031-3GP		XZ	Extractor Assembly REV 2	Firmed -		3/19/19	2 Ea	0 Ea	2 Ea	\$1,511.40/Ea	\$3,022.80
							MAR 05 2019		DP				
2	189297	RBW6405G06131-3GP		XZ	Reaction Assembly REV 3	Firmed -		3/19/19	2 Ea	0 Ea	2 Ea	\$795.00/Ea	\$1,590.00
							MAR 25 2019		DP				
Grand Total:												\$4,612.80	

Order Notes

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Procurement Quality Clauses

- A005 RIGHT OF ENTRY
- A007 FIRST ARTICLE INSPECTION (FAI) BY SELLER, (DOCUMENTATION MAINTAINED BY SUPPLIER)
- A012 CHEMICAL AND PHYSICAL TEST REPORTS
- A016 PERSONNEL QUALIFICATION
- A017 RAW MATERIAL IDENTIFICATION (AS APPLICABLE)
- A026 CERTIFICATION OF MATERIAL CONFORMANCE
- A041 QUALITY MANAGEMENT SYSTEM
- A042 DART NOTIFICATION BY SUPPLIER
- A043 RETENTION OF QUALITY DOCUMENT
- A048 COUNTERFEIT PARTS AVOIDANCE, DETECTION, MITIGATION AND DISPOSITION PROGRAM
- A049 SUPPLIER AWARENESS

Plex 1/22/19 1:11 PM dart.Lussier.Patrick

Packing List

Bill Dart Aerospace Ltd.
To: 1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Canada

Ship
To: 1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Canada

Shipment No: 24856
Shipment Date: 20-Mar-2019
Ship Via: Pick up at METEC
Order Number: 3390
Order Date: 01/22/19

Customer Code: DART
Phone: (613) 632-9577
PO Number: PO042355
Terms: Net 60 Days

----- Quantity -----								Job
<u>Item</u>	<u>Open</u>	<u>Shipped</u>	<u>B/O</u>	<u>Canceled</u>	<u>Unit</u>	<u>Description</u>	<u>Revision</u>	<u>Number</u>
2	2	2	0	0	EA	DART-RBW6405G06131-3GP Reaction Assy.	3	3390-02

The delivered goods must be inspected upon receipt to confirm compliance. Should there be discrepancies please notify METEC within 30 days of delivery. The goods are otherwise deemed accepted.

Received In Good Order By

Page 1 of 1



20 Terry Fox Drive, Vankleek Hill, Ontario K0B 1R0

Tel. (613) 678-3957 & (613) 678-2782 Fax (613) 678-3956 metec@metec.ca

CERTIFICATE OF CONFORMITY

SOLD TO:

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, Ont.
K6A 1K7

SHIPPED TO:

same

Quantity	Part Number	Part Name	Dwg Rev.#	P.O. Number
2	DART-RBW6405G06131 3GP	Reaction Assy.	3	42355

MATERIAL: supplied by METEC

We hereby certify that the above parts were made in conformance with applicable drawings.

METEC Metal Technology Inc.

George Theoret

Vankleek Hill, March 20, 2019

Entered: _____ Date: _____



WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

Route update only ☐

NCR No. _____

DISPOSITION

Rework ☐
Scrap ☒
Use-as-is ☐

DEPARTMENT/PROCESS

Skid-tube ☐	Cross tube ☐	Eng. (Non-AW) ☐	Engineering ☐
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Water Jet ☐
Large Fab ☐	Finishing ☐	Rec/Store/Packaging ☐	Supplier ☒
			Quality ☐

Job: 189297

Part No. RBW6405G0613-3G

Date : MAR 27 2019

Sequence #: 120 QCG

QTY Affected : 2

MRB (QSI042)

9.86
MAR 27 2019

Description Work Order Deviation

Disposition

- PARTS HAVE NICKS ON MACHINED SURFACE.
- WELD QUALITY NOT VISUALLY ACCEPTABLE.

- SCRAP

DAS
68
9-89

Completed By

Lead hand / Supervisor

QC / QA Coordinator

DAS
68
9-89
MAR 27 2019

Root Cause

Operator ☐
Manufacturing Process ☐
Equip/Tooling ☐
Handling/Preservation ☐
Material ☐
Product Improvement ☐
Process Improvement ☐
Human Factors ☐

☐ Pressure/Forced
☐ Bending
☐ Crushing
☐ Cracks
☐ Crimp/Kink/Ripple/Wave/Twist
☐ Marks/Chatter
☐ Mislabeled

FAULT CATEGORY

☐ Contamination
☐ Misaligned/off center
☐ BOM/Route
☐ Broken/Damage/Defect
☐ Incomplete/Unclear Instructions
☐ Drill Holes
☐ Fit/Function

☐ Power Loss/Surge
☐ Folio/Program
☐ Grain Direction
☐ Weld
☐ Wrong Stock Pulled
☐ Out of Sequence
☐ Off-set/Set-up

☐ Positioned Wrong
☐ Outside Tolerance
☐ Drawing
☐ Finish
☐ Part Lost/Missing
☐ Misread

Other/Details: